Patton, seen at left as a pioneer in the U.S. Army's fledgling tank force during World War I, did not see horses versus tanks as an either-or proposition until the German Blitzkrieg in 1939. At right, Patton as a LTC at Fort Myer, Va., in 1934.

Patton Versus the "Motor Maniacs":

An Inter-War Defense of Horse Cavalry

by John Daley

Few American feats of arms have garnered more notoriety than George S. Patton, Jr.'s successful application of mechanized warfare during August 1944. The topic of numerous biographies, and later, an Academy Award-winning movie, "Blood and Guts" has become a part of our popular culture as well as our history. Aided by his voluminous correspondence and commentaries on the art of war, Patton's biographers have thoroughly explored his earlier years in order to identify the roots of his adaptability and inventiveness, characterized by the breakout from Avranches and subsequent events during that pivotal month.

The results of this search have, of course, been mixed. For every hint of farsightedness in the pre-World War II Patton, an equally prominent dash of retrospection seems to appear, leaving succeeding generations to discover a complex personality, mixed motives, and doubt, rather than the willingness to exchange all horses for tanks that some might have expected. Commissioned a cavalry officer, Patton transferred to the Tank Corps in 1917 and commanded a light tank brigade during the St. Mihiel and Meuse-Argonne operations. Having developed much of that new arm's tactics, he nevertheless returned to the horse cavalry and remained there until 1940. Faced with this puzzle, biographers wishing to underscore Patton's later mastery of combined arms warfare in the machine age emphasized that this apparent backslide had been at least partly motivated by an instinct for career preservation.[1]

Indeed, when Congress placed the Tank Corps under the Chief of Infantry's control in June of 1920, with the approval of no less than General John J. Pershing, the future practitioner of armored breakout and pursuit had ample cause to believe that he held a dead-end job. During the interwar years, most senior American infantry officers continued to regard the tank as an infantry support weapon, rather than the basis of a new combat arm capable of revolutionizing warfare. However, Patton's consequent return to the Cavalry in October of that year merely brought him into contact with other superiors who — like their fellow cavalryman, Pershing — argued that machine power was still an auxiliary to muscle power, at least at the tactical level. Patton's interwar critique of mechanization accented this theme: for the good of the service, machines and horses would have to coexist.

The principal motive behind his conclusion, however, remains problematic. Was Patton a tanker at heart who reluctantly hedged his bets by telling more conservative superiors what they wanted to hear during peacetime? Or was he a horse soldier who reluctantly gave in to full mechanization as war approached?

It is safest to argue that the truth lies somewhere between these two simplistic extremes, but the assurance that the innovator of 1944 had been an innovator all along nevertheless appears the more unlikely. When Guderian's panzers finally provided Patton with an unassailable excuse for returning to tanks, Patton was only beginning to look for one. His previous defense of the horse stemmed as much from a carefully considered professional opinion as from career designs. That the two dovetailed so neatly was — for an aging officer who so often despaired of making general in a peacetime army — the result of coincidence rather than cooperation.

The sincerity of Patton's interwar belief in the interoperability of mechanized and horsed formations is indicated by three considerations. First, and most obviously, he advocated — well before leaving the Tank Corps, when his career could have depended on such advocacy — that the Army retain horse cavalry for its central role in the exploitation of breakthroughs. Similarly, in May 1940, when newly appointed Chief of Staff George C. Marshall showed a kinder disposition to mechanization, and when peacetime budgetary constraints simultaneously disappeared, Patton nevertheless believed that, if properly equipped and led, a horse cavalry division was capable of repelling tanks.[2] An examination of the intervening years reveals the third indicator of Patton's sincerity: His opinions often evolved independently of guidance from the succession of chiefs of cavalry and others who controlled his career. Although his attack on "motor maniacs" who believed in the cavalry horse's obsolescence indeed placated superiors, it influenced them also.

Prior to the National Defense Act, Patton's official and unofficial commentaries on mechanization were probably no more or less affected by his career interests than was the case after his return to the cavalry. While belonging to an independent tank corps, he avidly urged *that* organization's retention. In the future, he argued, mobile armies would operate over vast expanses of poorly reconnoitered land where there were few reliable roads and, therefore, in tactical situations unlike those encountered in Western Europe during the Great War. Incomplete reconnaissance meant a need for armored protection, and the scarcity of paved roads and railroads promised to make irrelevant the massive supplies of artillery ammunition for equally massive barrages. More than before, the tank's armored protection and direct fire capability were essential for defeating machine guns and closing with the enemy.[3] But even while serving in the pre-National Defense Act Tank Corps and recommending its continuation, Patton made his reservations clear. The tank, he warned, had not replaced the cavalry, or any other extant combat arm. Nor could it be expected to effect strategically significant exploitations without horsed units, despite its durability and firepower. For Patton, the shock effect wielded by a division of cavalry, when aided by the fire of three battalions of light tanks, was the crucial factor.[4]

Upon his return to the cavalry, Patton continued to urge the adoption of an independent tank corps, but emphasized the horse's indispensability as well. Equally important, he was more willing than before to take issue with those who did not. In a July 1921 *Infantry Journal* article entitled "Cavalry Tanks," infantry tanker Bradford Chynoweth reasoned that, in future wars, horsed formations would be unable to penetrate enemy cavalry screens without tank support, particularly because those screens were likely to employ machine guns and tanks of their own. Despite numerous disclaimers — whether sincere or not — this evaluation of mechanization's potential left the horse's future open to question as far as Patton was concerned. Chynoweth, he complained, had depicted a "senile and impotent" horse cavalry without noting the contemporary tank's poor mobility over rough terrain.[5] Before his return to the cavalry, Patton had also cautioned that tank-less reconnaissance forces would prove inadequate, but an admission to this effect did not appear in his rebuttal of Chynoweth. Instead, he established the first of three themes that would come to characterize his own less optimistic assessment of mechanization during the next eighteen years.

That theme was the overspecialization of the tank; a machine more suited to penetration than envelopment. Since cavalry operations normally entailed the latter, Patton argued, cavalry tanks would be unnecessary in all but special circumstances. Similarly telling in his critique of Chynoweth was his reversal of an earlier proposal to use tanks as feed carriers for horsed units: He now contended that a cavalry equipped with automatic weapons was "wholly self-sufficient" because horses, unlike tanks, needed no lines of supply. Only then did Patton urge the re-establishment of an independent tank corps whose elements could be temporarily assigned to assist cavalry when needed. Fixated more than Chynoweth on the tank's present capabilities than its future potential, he no longer stressed the practicality of large mechanized forces outside of Europe. In Texas, Mexico, Canada, and the Philippines, he predicted, tank-heavy forces would likely suffer in the face of conventional opposition.[6]

If tanks were overspecialized, so, too, were tankers. In an April 1922 *Cavalry Journal* article entitled "What the World War Did for Cavalry," Patton asserted that, because horsed troops were not used extensively after 1914, they had avoided the negative side effects of technological innovation, tactical inflexibility, and rapid expansion of armies. Chief among these was the unduly short training period allotted individual soldiers, and tankers spent much of that period honing mechanical skills. As a result, they had become hastily trained semi-military technicians, rather than military professionals with a collective grasp of tasks other than their own. Only because trench warfare was as stereotyped as those who fought it had such a system survived until war's end. In the future, however, open warfare would require fully trained soldiers and leaders, as had been the case prior to World War I. Compounding the effects of artificially limited training was the technocentric arrogance with which the tankers viewed traditional arms such as horse cavalry. In Patton's estimation, many had become "overconfident of the effectiveness of their favorite weapon," whereas the cavalryman's more comprehensive training had preserved his adaptability.[7]

Once he had noted the practical limitations of cavalry tanks, Patton focused on armored cars — tactical vehicles that still fell within the boundaries set for cavalry by the National Defense Act. This change could be rationalized easily enough for, as Patton noted in his January 1924 article, "Armored Cars with Cavalry," no tank then in unit service could keep up with cavalry horses except under limited circumstances. Although the same was true of contemporary armored cars, at least a suitable model of the latter could be built using automotive components readily available during peacetime. Patton suggested that a standard commercial two-ton truck chassis be armored well enough to defeat rifle fire from beyond 100 yards and equipped with a .30 caliber machine gun capable of 360-degree traverse. Roof and floor armor were to be omitted so that a favorable horsepower-to-weight ratio could be obtained with engines already on hand. As for the crew's protection, use of one's weapons was the best defense in any case, and enemy efforts to engage a moving vehicle would usually fail. In short, Patton's ideal armored vehicle was as simple and unspecialized as possible; qualities which, he quipped, were sure to "arouse the ire of every inventor."[8]

For most of the 1920s, Patton's critique of mechanization centered on the premise that horses were still necessary for exploitation, screen, guard, and covering force missions because cur-

rent armored vehicles lacked the versatility to keep up with their muscle-powered counterparts. After May 1928, when he became plans and training officer for the Chief of Cavalry, Herbert B. Crosby, a second reservation appeared in his commentaries increasingly often: The extreme costs of development and production would prevent the tank's use in large numbers, no matter how nimble and durable the automotive engineers could make it. Six hundred dollars was enough to secure horses for a patrol of four men, but the simplest of wheeled armored cars cost $1,000.00 and offered far less cross-country mobility. The tank, while offering its crewmen better mobility and protection than the armored car, was not going to be had for less than $12,000. Moreover, Patton was still anticipating a conflict in Mexico or the Far East, where a lack of suitable roads would isolate mechanized elements from their fuel supplies.[9]

After warning of the steep costs associated with operating tanks in the more remote theaters of future wars, Patton admitted that armored fighting machines were "here to stay" and essential for securing horsed cavalry formations in the face of enemy armor. Moreover, in an April 1930 article co-written with fellow cavalry officer C. C. Benson, he now contended that a cavalry division should possess an organic tank element, rather than one temporarily detached from an independent corps. Lest such a view parallel Chynoweth's earlier one too closely, Patton again highlighted the machine's limitations: Horses could function effectively on half rations whereas tanks and armored cars, even when fully supplied with repair parts, continued to deteriorate.[10] Both authors had recommended compromises between horse and machine, but Patton was, for the moment, less willing to regard the latter as ascendant.

The following month, Patton expanded the scope of his critique still further. Having thus far focused mainly on the armored vehicle's technological and budgetary limitations, he now added a third theme — criticism of a proposed tank division table of organization. As in 1921, his foil was an Infantry tank officer rather than a fellow cavalryman. In a staff study dated 17 April 1930, Colonel James Kelly Parsons, the field development officer for the Army's current battalion-sized mechanized force, recommended that the Army organize six tank divisions "as soon as practicable" because mechanization was sure to play a prominent role in America's next war. Each of those divisions was to operate independently of other combat arms and be subject to the control of one of six field army commanders. Their 13,500 tanks and self-propelled artillery pieces, based on the Christie suspension, would cost 270 million dollars.[11]

Despite his role in leading tank units during WWI, Patton maintained his interest in horse cavalry until the eve of WWII. Third from left, he is seen here as part of the team that won the 1931 Argentine Cup in polo.

Compared with the tiny, poorly-equipped mechanized force with which the Army was then experimenting, Parsons' proposal was theoretically, as well as financially, radical. Had he recommended a much smaller outlay of money and equipment, the basic building block of the new division — the 16-ton Christie tank — would have remained a source of contention, for not even those officers in favor of more extensive mechanization agreed as to its suitability. Benson heralded its automotive features as "the best in the world." Parsons was also impressed with its convertible suspension and 70-mile-per-hour performance in several proving ground tests, and added that its 47mm main gun sacrificed no firepower in exchange for speed. Conversely, many of Patton's earlier complaints about the excessive cost and overspecialization of armored fighting vehicles had been aimed specifically in Christie's direction, including the lament that "unfortunately, inventors don't have to fight the things they make."[12]

Seen against a backdrop of budgetary constraint, Patton's view was bound to find favor with his branch chief and, given Parsons' determination that the tank divisions remain independent of conventional infantry and cavalry formations, this was doubly so. On 19 May, Patton laid out his objections to the Parsons plan in a memo to Crosby's successor, Guy V. Henry. Like the breakdown-prone Christie, he argued, a division built around 486 of them was of limited utility. And mechanical reliability was not the only problem; a shortage of cargo space would limit the size of future overseas deployments. For Western Europe, where roads and railroads were plentiful enough to facilitate the supply of larger forces, a maximum of two field armies and two tank divisions could be expected. Worse yet, if the next war took place at the end of a longer supply line — in Asia — the same amount of cargo space would prove inadequate for any more than one army and one of Parsons' divisions. Similar considerations faced any prospective invader of the United States.[13]

Logistics aside, Patton added that tanks were not tactically suited to operations in jungles or deserts, and that their employment in such situations against unmechanized opponents would be like "pursu[ing] a fly with a sledge hammer." Even in the event of another European war, the tank would probably prove less effective than its mechanically primitive ancestors because countermeasures had improved since 1918. And even if no enemy tanks, antitank guns, mines, or ditches were present, tanks needed infantry support that the proposed table of organization did not provide: Parsons had called instead for dismounted crewmen armed with Thompson submachine guns to defend as infantry while the tanks, like so many cavalry horses, were withdrawn to a secure position. Applying his overspecialization theme in its most farsighted mode to date, Patton asserted that the exclusion of infantry from a tank division table of organization was a "grave mistake." Not only was a tank-pure unit's organization poorly suited to the performance of infantry tasks, but once the dismounted crewmen had become decisively engaged elsewhere, their tanks would be effec-

tively immobilized and liable to capture whether faced by purpose-built antitank defenses or not.[14] This observation foreshadowed subsequent wartime reductions in tank-to-infantry ratios, including the reorganization of Hitler's panzer divisions after September 1939 and the formation of the U.S. Army's light armored divisions in September 1943.

Two of Patton's other 19 May 1930 recommendations also set significant precedents for interwar superiors then seeking to soften the effect of the National Defense Act's tank provision. When, on 30 October, Chief of Staff Charles P. Summerall directed that the Army's small independent mechanized force be made permanent, he was pursuing a course of action that Patton had recommended in his critique of the Parsons study. Similarly, Patton's suggestion that all existing branches experiment with mechanization surfaced in May 1931, when Summerall's successor, Douglas MacArthur, terminated the "permanent" mechanized force in favor of this latter option. Although a shortage of funds prevented both of Patton's recommendations from being applied simultaneously, they were applied in succession, and to the chagrin of a chief of infantry, who had hoped to protect his monopoly on tracked armored fighting vehicles. After the consequent establishment of the 7th Cavalry Brigade (Mechanized), this interbranch tension remained until the Infantry's tanks and the Cavalry's "combat cars" were subsumed into the quasi-independent Armored Force.[15]

In the meantime, many of Patton's reservations about currently available vehicle designs remained, and his doubts concerning the deployment of large armored formations overseas died hard. His own experiences at the Army's Desert Training Center during the spring of 1942 would remove many of his concerns regarding the practicality of armored operations in deserts, but this, too, was a late development. Until the spring of 1940, Patton's assessment of mechanization's potential remained a guarded one, but however distorted that assessment may appear with the aid of hindsight, there was a solid grain of truth in it. Not only did Patton's more mechanization-oriented colleagues in the cavalry also fail to solve the logistics riddle of armored warfare by the eve of the Armored Force's establishment, but a complete solution continued to elude American tankers throughout World War II, when budgetary constraints were less problematic. So, too, did some contemporary "motor maniacs" complain about the Christie tank's less practical features, and few mechanization enthusiasts, even those in the infantry, realized how heavily armed and armored their machines — and those of their opponents — would eventually become.

It is doubtful that even the most insightful planner, whether detractor or proponent, could have accurately projected mechanization's wartime course merely by observing America's small, poorly funded interwar experiments, and any assessment of Patton's efforts to do so must be tempered by this realization. Nor does that effort's partial failure make it any less significant; Patton's often unsteady, equivocating course between horse and machine is, after all, indicative of that taken by the U.S. Army as a whole. Equally to the point, his attacks on the technological, budgetary, and organizational problems of mechanization often came without prompting from more conservative, horse-oriented superiors — those superiors were as likely to follow *his* lead. They welcomed his opposition to the adoption of insufficiently tested machines and flawed schemes for their employment as a badly needed infusion of realism, and that infusion served their own defense against unlimited mechanization well. Convenient to those who wielded influence over Patton's career, his restraint was equally troublesome for many of those who did not. Nevertheless, it was mainly the product of a professional's carefully considered opinion rather than that of a careerist's instinct for self-preservation.

Notes

[1]Martin Blumenson, ed., *The Patton Papers*, Vol. I, (Boston: Houghton Mifflin, 1972), pp. 840-2; Blumenson, *Patton: The Man Behind the Legend, 1885-1945*, (New York: William Morrow, 1985), pp. 121-3; Ladislas Farago, *Patton: Ordeal and Triumph*, (New York: Ivan Obolensky, 1963), pp. 102-3; Carlo D'Este, *Patton: A Genius for War*, (New York: Harper Collins, 1995), pp. 301-303.

[2]Blumenson, pp. 946-50.

[3]Patton, "Tanks in Future Wars," *Infantry Journal* XVI no. 11 (May 1920), p. 961.

[4]Patton, "Further Notes on the Use of Tanks in Various Operations Including Open Warfare," April 1920, Box 11, George S. Patton, Jr. Collection, Library of Congress, Washington, D.C., p. 4; Patton, "Light Tanks in Exploitation," (Typescript of AEF General Staff College lecture), 5 Dec. 1918, ibid., p. 9.

[5]Bradford G. Chynoweth, "Cavalry Tanks," *Cavalry Journal* XXX no. 124 (July 1921), pp. 249-51; Patton, "Comments on 'Cavalry Tanks'," ibid., p. 251.

[6]Patton, "Light Tanks," p. 9; Patton, "Comments," pp. 251-2.

[7]Patton, "What the World War Did for Cavalry," *Cavalry Journal* XXXI no. 127 (April 1922), pp. 167-8.

[8]Patton, "Armored Cars with Cavalry," *Cavalry Journal* XXXIII no. 134 (January 1924), pp. 6-8.

[9]Patton, "Notes for the Chief of Cavalry," memorandum to Chief of Cavalry Herbert B. Crosby, 1 August 1929, Box 56, Patton Collection, pp. 2-3.

[10]Patton and C.C. Benson, "Mechanization and Cavalry," *Cavalry Journal* XXXIX no. 159 (April 1930), pp. 238-9.

[11]James K. Parsons, "Mechanized Forces," study submitted to Adjutant General's Office, 17 April 1930, General Correspondence File, Entry 860, Record Group 407, National Archives, Washington, D.C. Commentary on the project's urgency is found on p. 1; Commentary on unit cost and number of vehicles required is from p. 9.

[12]Benson, "The New Christie 'Model 1940'," *Infantry Journal* XXXV no. 3 (September 1929), p. 261; Parsons, p. 4; Patton, "Armored Cars," p. 8.

[13]Patton, "Subject: Study of Mechanized Forces by Colonel James Kelly Parsons," memorandum for the Chief of Cavalry, 19 May 1930, Decimal File 537.3, RG 407, NA.

[14]Ibid., pp. 2, 5.

[15]C.P. Summerall, memorandum to Assistant Chief of Staff, G-3, 30 October 1930, Decimal File 537.3, RG 407, NA; Douglas MacArthur, "General Principles to govern in Extending Mechanization and Motorization throughout the Army," 1 May 1931, Decimal File 537.3, RG 407, NA; George C. Marshall, "Subject: Mechanization," memorandum to ACofS G-3, 5 June 1940, Decimal File 320.2, RG 407; "Subject: Organization of the Armored Force," 10 July 1940, Decimal File 320.2, RG 407, NA.

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